

Rectangles Counting

Let R be a rectangle with integer side lengths. The rectangle is divided into unit squares. Considering one of the diagonals, we denote by $f(R)$ the number of squares which have a common interior point with it. For example, if the side lengths of R are 2 and 4 then $f(R)=4$. Write a program to find out the number of all different rectangles R for which $f(R) = N$. Two rectangles with sides $a \times b$ and $b \times a$ are not different.

□

Input

In a single line of the standard input the integer N ($0 < N < 10^6$) is given.

Output

The only line of the standard output should contain an integer – the calculated number of rectangle.

Sample Input

4

Sample Output

4

Problem for kid - Please, think like kid.